UNITED STATES PATENT AND TRADEMARK OFFICE

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| 10/782,739 | 02/18/2004 | Abhishek Chauhan | 2006579-0556 | 1672 |

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| EXAMINER |
|---|
| LANIER, BENJAMIN E |

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| 2432 | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *18 August 2008*.

2a)☐ This action is **FINAL**.  2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1,4-32 and 35-45* is/are pending in the application.

  4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4-32,35-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

  a)☐ All  b)☐ Some * c)☐ None of:

  1.☐ Certified copies of the priority documents have been received.

  2.☐ Certified copies of the priority documents have been received in Application No. _____.

  3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

  * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
  Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

# DETAILED ACTION

## *Continued Examination Under 37 CFR 1.114*

1.      A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection.  Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114.  Applicant's submission filed on 18 August 2008 has been entered.

## *Response to Amendment*

2.      Applicant's amendment filed 18 August 2008 adds claim 45. Applicant's amendment has

been fully considered and entered.

## *Response to Arguments*

3.      In response to applicant's arguments against the references individually, one cannot show

nonobviousness by attacking references individually where the rejections are based on

combinations of references.  See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re*

*Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

## *Claim Rejections - 35 USC § 112*

4.      The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

5.      Claim 45 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant regards as

the invention.

6.      Claim 45 requires both allowing and rejecting of a second message, which renders the

claim indefinite because it is unclear with the claimed device is allowing or rejecting the second

message. For the purposes of examination, the claim will be treated as having the same claim

scope as claim 1, which requires allowing the second message.

### *Claim Rejections - 35 USC § 103*

7.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains.  Patentability shall not be negatived by the
> manner in which the invention was made.

8.      The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1.      Determining the scope and contents of the prior art.
2.      Ascertaining the differences between the prior art and the claims at issue.
3.      Resolving the level of ordinary skill in the pertinent art.
4.      Considering objective evidence present in the application indicating obviousness
        or nonobviousness.

9.      Claims 1, 4-6, 16-21, 31, 32, 35-37, 44-45 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Xie, U.S. Patent No. 6,772,347, in view of Chelsa, U.S. Publication No.

2004/0250124. Referring to claims 1, 17, 32, 45, Xie discloses a computer network firewall

wherein initially denied packets are additionally filtered dynamically (Col. 5, lines 45-50 &

Figure 6), which meets the limitation of receiving a first message, rejecting the first message

based on a rejection rule, determining, for the first message, an attribute that triggered the

rejection rule. The dynamic filter, filters the initially denied packets using an additional set of

rules, which are dynamically generated (Col. 5, lines 50-52), which meets the limitation of

generating an exception rule to the rejection rule which rejected the messages with the attribute.

The initially rejected packets, and later packets, can be allowed based on the newly generated

rules used by the dynamic filter (Col. 5, lines 63-66), which meets the limitation of receiving a

second message having the attribute, and allowing the second message, responsive to the

exception rule. Xie does not disclose dynamically generated rules when it is determined that

packet denial is greater than a desired threshold amount. Chelsa discloses maintaining a

frequency for the number of occurances with which messages were rejected ([0017]), which

meets the limitation of incrementing, for the attribute, a count of the number of messages

rejected based on the attribute, based on the count for the attribute, determining a frequency with

which messages having the attribute were rejected based on the rejection rule. It would have

been obvious to one of ordinary skill in the art to dynamically generate exceptions for the

dynamic filter of Xie based on a desired amount of allowable packets in order to minimize the

blocking of legitimate traffic as taught be Chelsa ([0017]).

Referring to claims 4, 19, 35, Xie discloses that the dynamic filter generates rules using

criteria such as port number and IP address, which are extracted from incoming packets (Col. 5,

lines 52-55), which meets the limitations of the attribute is one of a message component, a value.

Referring to claims 5, 6, 20, 21, 36, 37, Xie discloses that the packets are initially denied

based on counter rules that increment the count until a threshold is exceeded (Col. 5, lines 10-

15), which meets the limitation of the frequency is a weighted/direct count of occurrences of the

attribute.

Referring to claims 16, 31, 44, Xie discloses that the packets are initially denied based on counter rules that increment the count until a threshold is exceeded (Col. 5, lines 10-15). The dynamic filter, filters the initially denied packets using an additional set of rules, which are dynamically generated (Col. 5, lines 50-52). Xie does not disclose dynamically generated rules when it is determined that packet denial is greater than a desired threshold amount. It would have been obvious to one of ordinary skill in the art to dynamically generate exceptions for the dynamic filter of Xie based on a desired amount of allowable packets in order to minimize the blocking of legitimate traffic as taught be Chelsa ([0017]).

10.     Claims 7-15, 22-30, 38-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xie, U.S. Patent No. 6,772,347, in view of Chelsa, U.S. Publication No. 2004/0250124, and further in view of Balasubramanian, U.S. Publication No. 2005/0086206. Referring to claims 7, 8, 12, 13, 22, 26, 27, 30, 38, 39, 41, 42, Xie discloses filtering packets using rules based on port number and IP address (Col. 5, lines 58-60). The rules can be stored in a memory (Col. 4, lines 5-8), which meets the limitation of a trie structure, wherein each node in the trie is associated with a component. Xie does not specify filtering based on URLs and URL descendants. Balasubramanian discloses a rule based filtering system where URL requests are filtered at the domain and IP address level, based on rules, to allow/deny traffic for all domains beginning with identified IP address information ([0056] & [0065]-[0067]), which meets the limitation of maintaining a frequency for each instance of a URL component, wherein the frequency is a function of a number of occurances with which a URL component and its descendants were rejected by a rule, selecting a URL component according to a set of constraints, and generating an exception rule for the selected URL component and its descendants, the exception rule is

generated by inferencing a scalar data type of the descendants of the selected URL component. It would have been obvious to one of ordinary skill in the art at the time the invention was made to dynamically filter the packets of Xie using domain and IP address rules, as taught in Balasubramanian, in order to control access to specific areas in web space as taught by Balasubramanian (0016]).

Referring to claims 9-11, 14, 15, 23-25, 28, 29, 40, 43, Xie discloses that the packets are initially denied based on counter rules that increment the count until a threshold is exceeded (Col. 5, lines 10-15), which meets the limitation of constraints selected with a frequency exceeding a threshold and having no children with a frequency above the threshold. Xie discloses filtering packets using rules based on port number and IP address (Col. 5, lines 58-60), but does not specify filtering based on URLs and URL descendants. Balasubramanian discloses a rule based filtering system where URL requests are filtered at the domain and IP address level, based on rules, to allow/deny traffic for all domains beginning with identified IP address information ([0056] & [0065]-[0067]), which meets the limitation of the function is an aggregate of a number of occurances with which the URL component was rejected by a rule and the number of occurrences with which descendants of the URL component were rejected by the rule. It would have been obvious to one of ordinary skill in the art at the time the invention was made to dynamically filter the packets of Xie using domain and IP address rules, as taught in Balasubramanian, in order to control access to specific areas in web space as taught by Balasubramanian ([0016]).

### Conclusion

11.     Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN E. LANIER whose telephone number is (571)272-3805. The examiner can normally be reached on M-Th 6:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Benjamin E Lanier/
Primary Examiner, Art Unit 2432